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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,458	12/17/2004	Heinz Schneider	P08486US00/DEJ	2875

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ALEXANDRIA, VA 22314

EXAMINER
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MCGRAW, TREVOR EDWIN

ART UNIT	PAPER NUMBER
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3752

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/516,458	Applicant(s) SCHNEIDER, HEINZ	
	Examiner Trevor McGraw	Art Unit 3752	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 6,7,11-15 and 17-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-5,8-10,16 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/17/2004</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5, 8-10, 16 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the compressed-gas filled interior of the can" in line 3. There is insufficient antecedent basis for this limitation in the claim. Applicant has not positively claimed the features of the "can" as claimed in line 3 of Claim 1. Applicant is advised to make proper recitation to the features of the "can" to ensure that proper claim antecedence is maintained within the claims and that the claims accurately describe what Applicant deems as the present invention. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 8-10, 16 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Schneider (WO01/96208).

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In regard to Claims 1-5, Schneider (WO01/96208; see US 6,802,461 for English translation) teaches a pressure regulating valve (20) for use in an aerosol can (see abstract) having a spray valve (14) in which a pressure regulating valve (10) lowers a pressure level inside the gas-filled interior of the can to a regulation pressure level at which the spray valve (14) operates and the pressure regulating valve (10) has a regulating piston (22,30) that is guided in a housing (16) and is kept in equilibrium between a pressure acting on the piston face (see column 3, Lines 4-18) in a pressure regulating chamber (26) and a restoring force (24) and between the piston (30,22) and the housing (16) a sealing point (32,42,132) is provided that is closed at a pressure in the pressure regulation chamber (see Column 3, Lines 24-38 and Column 3, Line 66 thru Column 4, Line 26) above the regulation pressure level where a sealing means (32,42,132) is provided that seals off a free end of the piston (30,22) that is remote from the pressure regulation chamber (26) from the internal pressure of the can and the regulated pressure so that the pressures acting on axial faces of the free end of the piston (22,30) are independent of the level of the internal pressure of the can where the restoring force (24) is built up by means of a restoring spring that is located in a closed chamber (27) that is sealed off by a first seal (42) and an axial stop (46) is provided in at least one direction of motion between the piston (30,22) and the housing (16) for limiting the mobility of the piston (22,30). The valve arrangement of Schneider also teaches where the pressure regulating chamber (26,27) communicates with the sealing point (32,132) via openings (137) in the piston (22,30) and the sealing of the piston shaft from the cylindrical housing is effected with o-rings (42) that are disposed in grooves (See

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Figure 2; Grooves that "32", "42" and "132" sit within). Schneider further teaches where the piston shaft is sealed off from the cylindrical housing on both sides of the sealing point (32,42,132) and on one side of the sealing point a first seal is provided as part of the sealing means on the free end (see first seal above "22" in figure 2 on free end of piston "22" "30" opposite and above "42"). Schneider additionally teaches where the housing part of housing (16) that receives the free end of the piston (22,30) is surrounded by a cuplike housing (see lower end of "16" in Figures) and also where the spray valve (14) and the pressure regulating valve (20) are embodied as a preassembled unit (see Column 5, Lines 28-35 where it is taught that the spray valve and pressure regulating valve can be embodied separately and not a "structural unit" as described previously in the specification of US 6,802,461 to Schneider).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider (WO01/96208).

In regard to Claim 2 Schneider (WO01/96208) as taught and described above fails to teach where the sealing point is provided in a middle region of the regulating piston which at that point preferably has an annular groove. It would have been obvious

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to one having ordinary skill in that art at the time the invention was made to provide the sealing point in a middle region of the regulating piston with an annular groove, in order to provide for a manner in which the spring force and pressure regulating chamber are positioned closer to each other for better controlled spring force actuation by reducing the travel distance of a pressurized fluid and it has been further held that rearranging parts of an invention involves only routine skill in that art.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider (WO01/96208) in view of Turner et al. (US 5,456,480).

In regard to Claim 9, Schneider as taught and described above fails to teach where a spacer disk for adjusting the spring prestressing forces can be disposed in a closed chamber. However, Turner et al. (US 5,456,480) teaches that it is known to have a spacer disk for adjusting a spring prestressing force (see Column 6, Lines 23-64). It would have been obvious to one having ordinary skill in the art at the time the present invention was made to provide the closed chamber of Schneider with the spacer disk for adjusting a spring prestressing force as taught by Turner et al., in order to provide for a means of dampening the piston which prevents damage to the valve assembly.

### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Barker (US 3,378,205), Pericard et al. (US 6,039,306), Park (US 6,880,733), Brunet (US 4,4513,755).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trevor McGraw whose telephone number is (571) 272-7375. The examiner can normally be reached on Monday-Friday (2nd & 4th Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Trevor McGraw  
Art Unit 3752

TEM



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